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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/608,886	06/30/2000	Richard H. Selinfreund	L0532/7012	2479

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EXAMINER

ANGEBRANNDT, MARTIN J

ART UNIT	PAPER NUMBER
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1756

DATE MAILED: 12/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

ED 14

Office Action Summary	Application No.	Applicant(s)	
	09/608,886	SELINFREUND ET AL.	
	Examiner	Art Unit	
	Martin J Angebrannndt	1756	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on papers 4-11 and 13.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 85-251 is/are pending in the application.
- 4a) Of the above claim(s) 85-176 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 177-251 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) 85-251 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>4-6, 8-10</u> . | 6) <input type="checkbox"/> Other: _____ |

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1. In response to the applicant's traversing remarks, the examiner agrees and combines groups III and IV of the previous restriction as placing no serious search burden on the examiner. What seem to be typographical errors in the grouping of claims are also corrected. **A new voicing of the restriction groupings appears below and the restriction is made final.** The examiner proceeds with examination of the elected group III together with group IV. **Claims 85-176 (groups I and II) are withdrawn from consideration as there is a clear search burden present in examining these claims with those elected.**

The examiner would like to point out that it has been held in the courts that the "applicant has [an] obligation to call the most pertinent prior patent to [the] attention of [the] Patent Office in a proper fashion." [Penn Yan Boats, Inc. V. Sea Lark Boats, Inc., et al. 175 USPQ 260 (DC SFla 1972)]. The examiner would appreciate the applicant identifying why the cited reference is pertinent to the claimed optical recording media including relevant portions of the document cited. The applicant has cited approximately 200 references, some of which appear to be of limited probative value. US patents 5208630, 5128243, 5047215, 5546471, 4450231, 5569613, 6157551 and 5740574 are exemplative of patents cited by the applicant, which seem to be of limited relevance.

2. Restriction groupings:

- I. Claims 85-157, drawn to a methods for authenticating an optical storage medium, classified in class 369, subclass 53.21.
- II. Claims 158-176, drawn to a method for preventing copying of an optical medium by adding a changeable material to a formed optical medium, classified in class 369, subclass 100.

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III. Claims 177-251, drawn to an optical recording medium, classified in class 430, subclass 270.11.

3. The disclosure is objected to because of the following informalities: In the disclosure on page 7 at lines 8-10, merely passing through an interface which has refractive index change will not change the color or wavelength of the light. It may cause incident light to refract or shift in phase, but not change color. If a luminescent material (phosphorescent or fluorescent) is present, then the light energy could be absorbed and reemitted at a different wavelength. The shift in wavelength is due to energy losses (generally vibrational relaxation, internal conversion, external conversion or other radiationless deactivation processes) after the absorption. (see Skoog et al.) Raman scattering could also cause a wavelength shift but, without absorption

Please delete the cited sentence.

Appropriate correction is required.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 178-186 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 178, at line 7, “dis-uniformity” should read – dis-uniformity- - (misspelling).

The applicant may want to use the term - - non-uniformity- - instead, which is more accepted English terminology.

In claims 186, 207 and 229, “benzindodicarbocyanines” should read

- - benzoindodicarbocyanines - - . (misspelling)

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6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 177,187-202,204-217,219-226,228,230-237,239-242 and 245-251 are rejected under 35 U.S.C. 102(b) as being fully anticipated by Nakagawa et al. '852.

Nakagawa et al. '852 teaches in the examples with respect to figures 2-4 an optical disk having embossed therein read only (ROM) areas and writable (RAM) areas, which is over coated with a benzoindodicarbocyanine dye shown in figure 7 (10/18-55), a reflection film and a UV cured protective layer. The areas of the recording layer irradiated with the light change refractive index, but the ROM areas are not irradiated. (7/40-51). The ROM area has a plurality of pits formed therein containing information. (2/65-3/1). The reflectance of the recorded areas and unrecorded areas (0 or 1 bits) in the ROM and RAM are to be the same and the depths of the pits are optimized for this. (3/11-32).

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The examiner's position is that the ROM data relates to the addresses/position, data formats, a scanning guide and information concerning the types of information on the disk (RAM, ROM, programs, etc). and that the provision of a portion of the recording layer over the ROM area allows for the possibility of inadvertent exposure/writing to this area which would affect the ability to read the information. In the case of writable medium, there is also TOC information written into the medium, which directs the player during readings of the medium to the desired information, which was user recorded. The cyanine dyes are disclosed in the instant specification in table 1 as being fluorescent/emissive and the examiner holds that this is an inherent property of the cyanine dyes and therefore would be exhibited by those of the prior art as well.

9. Claims 177,187-202,204-217,219-226,228,230-237,239-242 and 245-251 are rejected under 35 U.S.C. 102(b) as being fully anticipated by Nakagawa et al. '852, further in view of Kayanuma et al. '217, Jaquette '085, Kulakowski et al. '954, Van Den Enden et al., '680, or Bish et al. '329.

Kayanuma et al. '217 teach read only areas as containing storage address information. (7/24-26).

Jaquette '085 teaches track and sector (address) information formed by the manufacturer (rather than the user). (5/11-25).

Kulakowski et al. '954 teach phase encoded (embossed) information relating to the format and recording characteristics of the medium. (5/21-55)

Van Den Enden et al., '680 teach address markings being formed by embossing during manufacture for recordable media. (4/55-65)

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Bish et al. '329 teach that format information is found in the manufacturer embossed areas of WORM media (4/49-56)

The citations of Kayanuma et al. '217, Jaquette '085, Kulakowski et al. '954, Van Den Enden et al., '680, or Bish et al. '329 are to support the position of inherency held by the examiner with respect to the type of data stored in the ROM of Nakagawa et al. '852 and its effect in allowing accessing of the medium.

10. Claims 177,187-242 and 245-251 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakagawa et al. '852, in view of Hamada et al. '955.

Hamada et al. '955 teach the use of various cyanine dyes, including indolenic cyanine dyes shown in column 11 as formula (30). 1,1',3,3',3'-hexamethylindotricarbocyanine iodide is embraced by this formula as indodicarbocyanine or benzoindodicarbocyanine dyes. The phenanthrene dyes (18,19) will also luminesce. The organometallic compounds may also luminesce and likely undergo intersystem crossing if they do so due to the presence of the metal center.

It would have been obvious to modify the invention of Nakagawa et al. '852 by using other dyes, such as those disclosed by Hamada et al. '955, in place of the benzoindolenic cyanine dyes used in the sample medium with a reasonable expectation of success based upon their use in writable optical recording media and the disclosure of equivalence within Hamada et al. '955.

11. Claims 177-180,184,187-191,194,196,205,213,215,230-237,239,240,242-245,247 and 249-251 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Vasic et al. '536.

Vasic et al. '536 teach an optical recording disk which allows an CD player or read only device to create a permanent mark on the disk when it is read/accessed. (3/9-4/26) The use of

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phase change recording media or dyes, including cyanine dyes in the copy count area is disclosed. (3/46-4/19).

12. Claims 177-251 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vasic et al. '536, in view of Hamada et al. '955.

It would have been obvious to modify the invention of Vasic et al. '536 by using other dyes, such as those disclosed by Hamada et al. '955, in place of the cyanine dyes or phase change recording materials used in the sample medium with a reasonable expectation of success based upon their use in writable optical recording media and the disclosure of equivalence within Hamada et al. '955

13. Claims 177-180,184,187-191,194,196,205,213,215,230-237,239,240,242-245,247 and 249-251 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Whitcher et al. '686.

Whitcher et al. '686 teach an optical recording disk which allows an CD player or read only device to create a permanent mark on the disk when it is read/accessed. (1/65-2/27) See examples using write once phase change recording materials.

14. Claims 177-180,184,187-191,194,196,205,213,215,230-237,239,240,242-245,247 and 249-251 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Smith et al. '484.

Smith et al. '484 contains a reactive layer which turns opaque to prevent reading of the underlying data. The use of photochromic dyes to initiate this in response to irradiation alone is disclosed. (3/57-4/38). After the reaction has occurred the underlying land cannot be read. (8/15-40 and 8/58-65). See examples disclosed with respect to figures 3-5 and described in columns 9 and 10.

15. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or

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improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

16. Claims 177-251 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-82, particularly 1-8 of U.S. Patent No. 6589626. Although the conflicting claims are not identical, they are not patentably distinct from each other because they seek coverage for the same subject matter and would unlawfully extend a portion of the coverage accorded claims 1-82, particularly 1-8 of U.S. Patent No. 6589626.

17. Claims 177-251 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-36, particularly 1-16 of U.S. Patent No. 6638593. Although the conflicting claims are not identical, they are not patentably distinct from each other because they seek coverage for the same subject matter and would unlawfully extend a portion of the coverage accorded claims 1-36, particularly 1-16 of U.S. Patent No. 6638593.

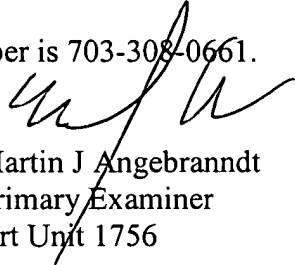
18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Martin J Angebrannndt whose telephone number is 571-273-1378. The examiner can normally be reached on Mondays-Thursday and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on 571-272-1385. The fax phone numbers for the

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organization where this application or proceeding is assigned are 703-872-9309 for regular communications and 703-872-9309 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



Martin J. Angebranndt
Primary Examiner
Art Unit 1756

December 8, 2003